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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte TOMMI KOISTINEN

Appeal 2009-003766
Application 09/980,549
Technology Center 2600

Decided: March 18, 2010

Before ROBERT E. NAPPI, JOHN C. MARTIN, and JOSEPH F. RUGGIERO, *Administrative Patent Judges*.

RUGGIERO, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Appellant appeals under 35 U.S.C. § 134 from the Final Rejection of claims 1-9. We have jurisdiction under 35 U.S.C. § 6(b).

We affirm.

Rather than reiterate the arguments of Appellant and the Examiner, reference is made to the Brief (filed June 24, 2008), the Answer (mailed September 19, 2008), and the Reply Brief (filed November 13, 2008) for the respective details. Only those arguments actually made by Appellant have been considered in this decision. Arguments which Appellant could have made but chose not to make in the Briefs have not been considered and are deemed to be waived. *See* 37 C.F.R. § 41.37(c)(1)(vii).

Appellant's Invention

Appellant's invention relates to a gateway which transmits data to and receiving data from a packet network. The gateway detects the load on the packet network, and adjusts the data transfer rate based on the detected load. (*See generally* Spec. 5:1-17).

Comment [jfr1]: The Spec. appear as a published PCT application included n the last bookmarked item "2001-11-15 Documents..." in the working file.

Comment [k2]: Not included in wf or eDan. Unable to verify

Claim 1 is illustrative of the invention and reads as follows:

1. A device, said device being a gateway and being configured to establish an interface for transmitting data to and receiving data from a packet network, comprising:

a plurality of transceiver units, each of said plural units being operable with variable transfer rates;

a detecting unit configured to detect a load upon said packet network; and

a control unit configured to adjust the transfer rate of said transceiver unit in response to the detected load;

wherein said control unit is configured to provide each of said

plurality of transceiver units with different priorities and to adjust the transfer rate of a transceiver unit with a higher priority on a higher value than the transfer rate of a transceiver unit with a lower priority;

wherein said transceiver units comprise a modem for modulating and demodulating non- speech data and a codec for encoding and decoding speech data for voice over Internet protocol;

wherein said control unit is configured to provide said codec with a higher priority than the modem, and

wherein said gateway is operatively disposed between a plurality of networks.

The Examiner's Rejection

The Examiner's Answer cites the following prior art references:

Chang	US 5,367,523	Nov. 22, 1994
Suzuki	US 5,493,610	Feb. 20, 1996

Tomi Yletyinen (Yletyinen), *The Quality of Voice Over IP*, Master's Thesis, Helsinki University of Technology, Faculty of Electrical and Communications Engineering, 1-110 (1998).

Claims 1, 2, 4, 5, and 9 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Suzuki in view of Yletyinen.

Claims 3 and 6-8 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Suzuki in view of Yletyinen and Chang.

ISSUE

The pivotal issue before us is whether the Examiner erred in determining the obviousness to the ordinarily skilled artisan of combining

the load condition based transfer rate adjusting teachings of Yletyinen, which is directed to a packet-switched network, with the load condition based transfer rate teachings of Suzuki, which is directed to a circuit-switched network.

FINDINGS OF FACT

The record supports the following relevant findings of fact (FF) by a preponderance of the evidence:

1. Yletyinen discloses (page 8, Fig. 2-3) a Voice over Internet Protocol (VoIP) gateway which functions to translate Internet Protocol (IP)-phone signals to ordinary telephone signals.

2. Yletyinen also discloses (page 42, section 3.3.2) that the VoIP gateway will respond to system congestion by adjusting the transfer rate of transmitted packets.

3. Yletyinen further discloses (page 42, section 3.3.2) that transfer rate reduction follows a priority media type degradation order of "video, data, audio, control."

4. Suzuki discloses (Fig. 1, col. 4, ll. 41-62) a transmission system including a modem for modulating and demodulating non-speech data and a codec for encoding and decoding speech data.

5. Suzuki further discloses (Fig. 7, col. 6, ll. 1-12 and col. 10, ll. 61-65) the measuring of system congestion by detecting the load on the transmitter and adjusting transmission rates in response to the detected congestion.

PRINCIPLES OF LAW

In rejecting claims under 35 U.S.C. § 103, it is incumbent upon the Examiner to establish a factual basis to support the legal conclusion of obviousness. *See In re Fine*, 837 F.2d 1071, 1073 (Fed. Cir. 1988). In so doing, the Examiner must make the factual determinations set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 17 (1966) (stating that 35 U.S.C. § 103 leads to three basic factual inquiries: the scope and content of the prior art, the differences between the prior art and the claims at issue, and the level of ordinary skill in the art). Furthermore,

> "there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness" [H]owever, the analysis need not seek out precise teachings directed to the specific subject matter of the challenged claim, for a court can take account of the inferences and creative steps that a person of ordinary skill in the art would employ.

KSR Int'l Co. v. Teleflex Inc., 550 U.S. 398, 418 (2007) (quoting *In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006)).

Also, "'[t]he combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results.'" *Leapfrog Enter., Inc. v. Fisher-Price, Inc.*, 485 F.3d 1157, 1161 (Fed. Cir. 2007) (quoting *KSR*, 550 U.S. at 416). "One of the ways in which a patent's subject matter can be proved obvious is by noting that there existed at the time of invention a known problem for which there was an obvious solution encompassed by the patent's claims." *KSR*, 550 U.S. at 419-20.

ANALYSIS

I. The obviousness rejection of claims 1, 2, 4, 5, and 9 based on the combination of Suzuki and Yletyinen.

With respect to each of the appealed independent claims 1, 2, 4, 5, and 9, Appellant's arguments focus on the contention that the Examiner has not established a proper basis for the proposed combination of Suzuki and Yletyinen. According to Appellant, (App. Br. 6-8; Reply Br. 4-6), the transmission system of Suzuki, which is a circuit-switched network, has a fundamentally different principle of operation than the packet-switched network system of Yletyinen and, therefore, the references teach away from combination with each other.

We do not agree with Appellant. As discussed by the Examiner (Ans. 4), Yletyinen discloses (FF 2) a packet-switched network in which a gateway responds to network congestion by adjusting the transfer rate of transmitted packets, but is silent about any particular manner of detecting network congestion. Suzuki, however, in a system for adjusting transmission rates dependent upon system congestion, provides a disclosure (FF 5) of measuring system congestion by detecting the load on the transmitter. While Suzuki is directed to a circuit-switched network as opposed to a packet-switched network as claimed, as argued by Appellant, we find that an ordinarily skilled artisan would have recognized and appreciated that the technique of detecting network congestion by measuring transmitter load would apply equally well to packet-switched networks such as Yletyinen.

With the above discussion in mind, we agree with the Examiner (Ans. 7-9) that the nature of the congestion problem in existing network

communication systems would suggest the solution proposed by the Examiner's proposed combination of references. *See Ruiz v. A.B. Chance Co.*, 357 F.3d 1270, 1274 (Fed. Cir. 2004) and *Pro-Mold & Tool Co., Inc. v. Great Lakes Plastics, Inc.*, 75 F.3d 1568, 1573 (Fed. Cir. 1996) (considering the problem to be solved in a determination of obviousness). In our view, the collective teachings of Yletyinen and Suzuki would have suggested to one of ordinary skill that the transmitter load detection disclosure of Suzuki would have served as an obvious enhancement to the packet-switched system of Yletyinen. According to *Leapfrog*, when a combination of familiar elements according to methods known to the skilled artisan achieves a predictable result, it is likely to be obvious.

We also find unpersuasive Appellant's argument (App. Br. 8-9; Reply Br. 6-7) that Yletyinen, contrary to the Examiner's contention (Ans. 4, 5, 9, and 10), does not give speech data priority over non-speech data in adjusting data transfer rates. As Yletyinen discloses (FF 3) an order of degradation, i.e., bit rate reduction, for various types of data in which non-speech data is degraded before speech data, we fail to see why an ordinarily skilled artisan would not have recognized such degradation order as a suggestion to give priority to speech over non-speech data when adjusting data transfer rates as claimed. Further, while Appellant argues (*id.*) that Yletyinen is silent about how the degradation order of data types is achieved, in particular, the control of the source of data as claimed, we find that the collective teachings of Yletyinen and Suzuki (which discloses the transfer rate control of the transmitter source of data) satisfy the claimed limitations.

For the above reasons, the Examiner's 35 U.S.C. § 103(a) rejection of independent claims 1, 4, and 9, as well as dependent claims 2 and 5 not separately argued by Appellant, is sustained.

II. The obviousness rejection of claims 3 and 6-8 based on the combination of Suzuki, Yletyinen, and Chang.

The Examiner's obviousness rejection of dependent claims 3 and 6-8 is sustained as well. We find no error in the Examiner's application (Ans. 6-8) of the round trip test packet load detection teachings of Chang to the combined system of Suzuki and Yletyinen. Appellant (App. Br. 11) has made no separate arguments for the patentability of claims 3 and 6-8 but, instead, has relied on the arguments asserted against independent claims 1, 4, and 9, which arguments we found to be unpersuasive as discussed *supra.*

CONCLUSION OF LAW

Based on the findings of facts and analysis above, we conclude that the Examiner did not err in rejecting claims 1-9 for obviousness under 35 U.S.C. § 103(a).

DECISION

The Examiner's decision rejecting claims 1-9 under 35 U.S.C. § 103(a) is affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv) (2007).

AFFIRMED

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